REMARKS

Favorable reconsideration and allowance of this application are requested.

1. Discussion of Claim Amendments

By way of the amendment instructions above, the claims have been amended so as to clarify the claimed subject matter. In this regard, claim 14 has been amended so as to emphasize that the calibration resolution is less than 0.05%. The prior preferred limitation of the calibration resolution being less than 0.01% now appears in new claim 19.

The embedded preferred embodiment of prior claim 14 has been deleted therefrom and now appears in new claim 20.

The embedded preferred embodiments regarding calibration resolution have also been deleted from claims 17 and 18. In addition, claim 18 has been further amended to recite therein the limitations of prior claim 14 (i.e., the calibration function comprises input of the real volumes obtained with at least two indicated volumes). Claim 18 on the other hand has been further amended so as to recite therein the limitation of claim 16 (i.e., the control system allows storage of a plurality of calibration settings in parallel, so that the settings corresponding to the current pipetting function can be selected for use each time).

Claim 21 is new and is based on original claim 1 (without the embedded preferred embodiments of the calibration resolution) and additionally defining that the control system calculates the calibration setting on the basis of one input volume only assuming that the real volume is in linear dependence with the set volume, the angular coefficient of the linear equation having been preset. Support for such language can be found in the originally filed specification at page 3, lines 23-27 and original claim 15.

Therefore, following entry of this amendment, claims 10-21 will remain pending herein for consideration, of which claims 10, 17-18 and 21 are in independent form. Allowance of all such pending claims is therefore solicited.

2. Response to Substantive Rejections

Prior claims 10-14 and 17-18 attracted a rejection under 35 USC §102(b) as allegedly anticipated by Kriz et al (US 2002/0005075). In addition, prior claims 15 and 16 attracted a rejection as allegedly being "obvious" and hence unpatentable from Kriz et al, claim 15 being based on the combination of Kriz et al and the "admitted" prior art and claim 16 based on Kriz et al alone. Applicants respectfully suggest that Kriz et al is inappropriate as a reference against the presently pending claims.

Applicants note that one important feature of the present invention is that the calibration resolution is less than 0.1 % (preferably less than 0.05% and more preferably less than 0.01%). Resolution means here the ratio of the precision of the measured volume to the target volume. For example, if the target volume is 100 µl, and the measured volume is fed by the precision of 0.1 µl (e.g. 100.1 µl) the resolution is 0.1 %. In practice the present invention is accomplished so that during the calibration the volume is fed with higher precision (i.e. with more numbers) than shown in the display during pipetting. It is understandable that the set pipetting volume must not be displayed with higher precision than is actually achieved.[1]

Turning attention to the applied reference of record, applicants note that Kriz et al indeed describe a calibration system into which the measured volume is fed. The system of Kriz et al then computes the calibration factor (see ¶ [0030]), i.e. the angular coefficient of the calibration equation (see page 1, line 36 of the present application).

[1] Applicants note that the description in the specification on page 4 lines 21-23 is meant to refer to the best possible resolution, which would be achieved in the ultimately rare situation that the calibration is

However, the measured volume is fed with the same precision, 0.1 µl, as the volume is shown when pipetting. The calibration is carried out in Kriz et al at a single point only. The only exemplified calibration volume is 100 µl (¶ [0033]). When the measured volume is fed by the precision of 0.1 µl, the calibration resolution is then 0.1 %. Significantly the maximum volume of the pipette has not been disclosed by Kriz et al. The volume is in any case at least 123.4 µl.

An old and well known pipette manufacturer, Brand GmbH, markets a 200 µl pipette in which the volume is displayed with the precision of 0.2 µl (see page 2, lines 22-23 of the present application). This precision is of course because better accuracy is not achieved. As already mentioned, it is not allowable to display the volume with a higher precision than is actually achieved. So, one may well assume that the maximum volume of the Kriz et al pipette is 200 µl. A pipette is calibrated about the median of the volume range, which in the case of the exemplified calibration volume, would be 100 µl. This indicates that the volume range is 0-200 µl. The best calibration resolution available would thus be 0.05 %. The pipette of Kriz et al would then however be used *only* at the maximum volume.

Kriz et al do not disclose anything at all about the correction factor (constant 2 in the calibration equation), so this must be preset in the Kriz et al pipette. When the minimum volume is zero, the factor is probably simply assumed to be zero also.

In principle the pipette of Kriz et al corresponds to that of Brand GmbH's discussed in the originally filed specification with the difference that latter presets the angular coefficient. Accordingly, Kriz et al. do not disclose or suggest at least a calibration resolution *less than 0.05 %*.

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carried out at the maximum volume. Applicants consider that a person skilled in the art would readily understand what is meant by such passage, especially in view of page 2 line 23 and page 7 lines 32-33.

Furthermore, applicants note that Kriz et al do not disclose or suggest a single point calibration in which the angular coefficient is preset. And Kriz et al do not disclose or suggest a system in which *two volumes* are measured and fed in the calibration (two point calibration).

The Examiner's interpretation of Kriz et al in view of claim 14 is suggested to be in error on this point. Specifically, Kriz et al in ¶ [0034] merely describe the normal procedure in which several portions are measured and their average is then used as the volume to be fed into the system.

Furthermore while Kriz et al do indeed describe that preset volumes can be stored in order to provide quick selection possibilities, the storing of *different* calibration settings is not suggested. On the contrary, Kriz et al describe another method in which the calibration coefficient can be changed if desired (see ¶ [0030]).

For the reasons advanced above, applicants respectfully suggest that the pending claims are not anticipated by or rendered obvious from Kriz et al either alone or with the acknowledged prior art pipettes. Withdrawal of the rejections advanced under 35 USC §§102(b) and 103(a) is therefore in order.

3. Information Disclosure Statement

The Examiner's attention is directed to commonly owned copending U.S. Application Serial No. 10/590,296 filed on June 25, 2007 which may be deemed relevant to the present application. To date, no substantive examination has occurred in the '296 application. A copy of the published PCT application corresponding to the '296 application is attached along with an appropriate form listing the same. Consideration of such information during prosecution of this application is requested.

4. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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